Blocking HIV-1 RNA's Journey: No Rev, No Ride

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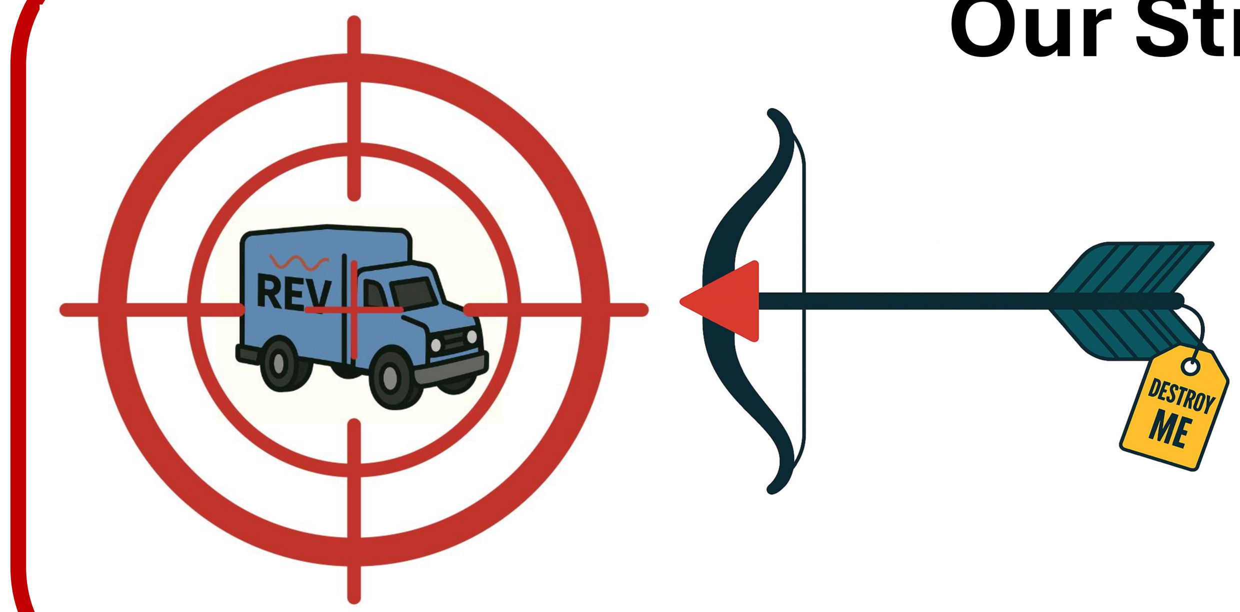
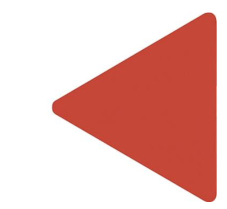
HIV – Still a Global Health Concern

Around 40 million people worldwide are living with HIV

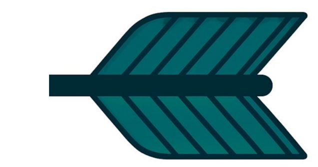
Current treatments can suppress the virus, but do not provide a cure for AIDS

Our Strategy- PROTACS



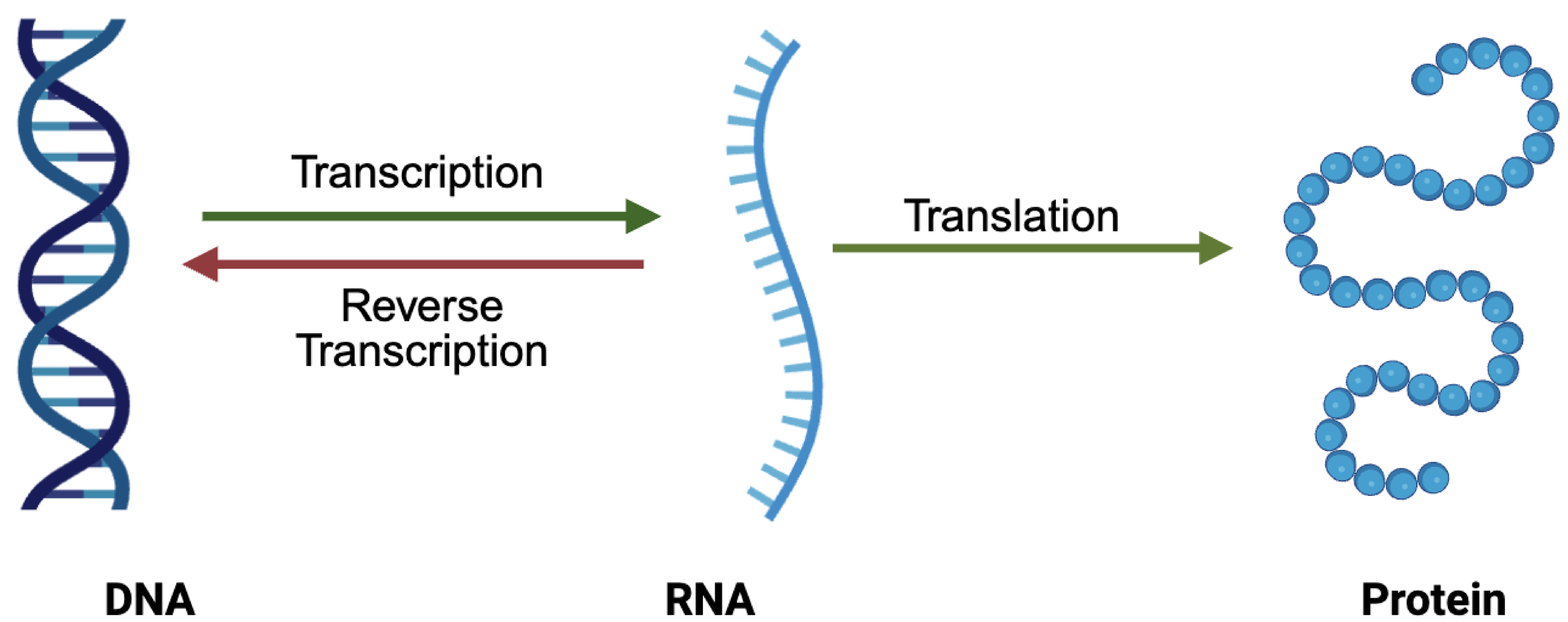


Rev Specific Arrowhead Protein (Nanobody)

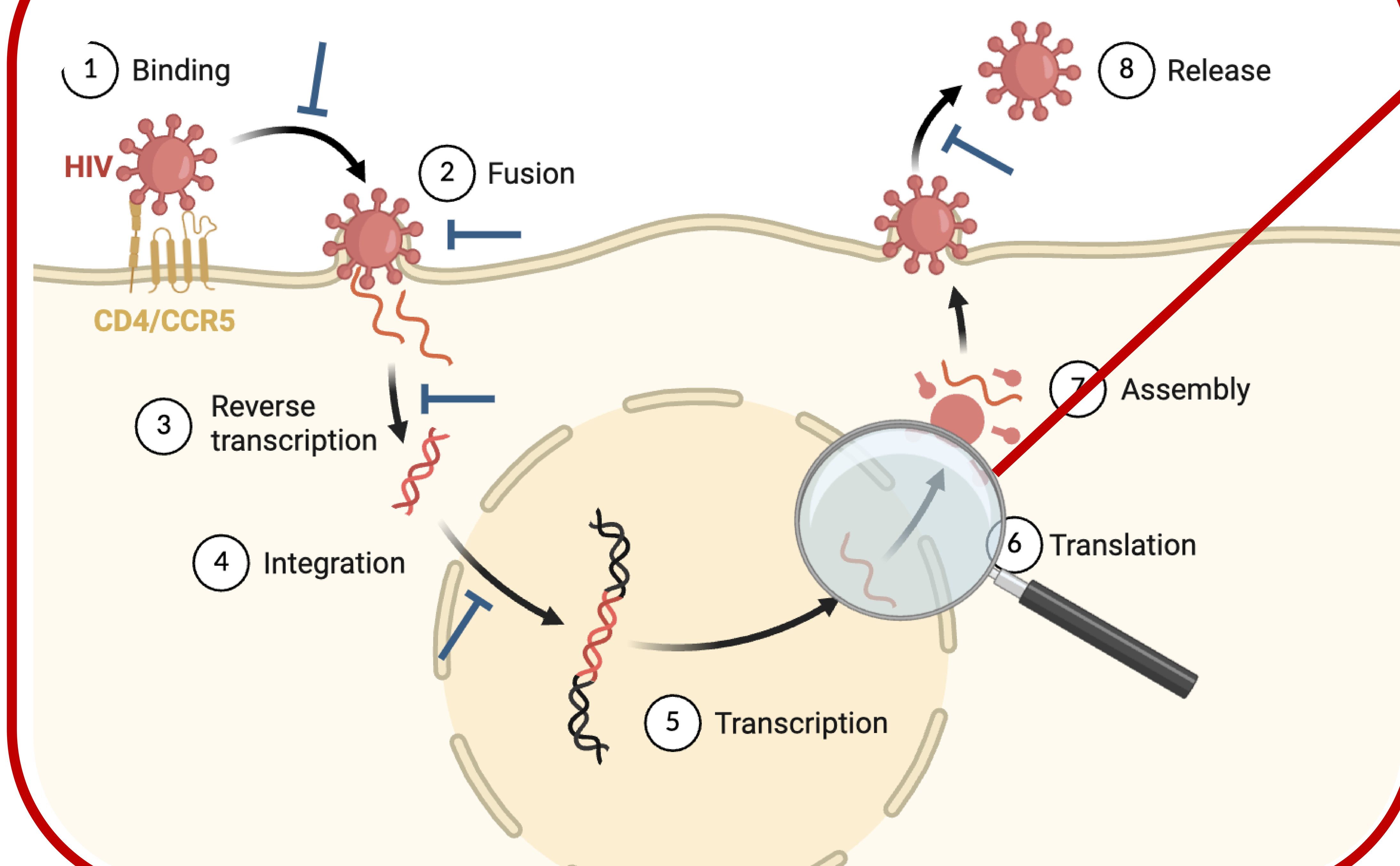


Degradation Tag Tail Protein

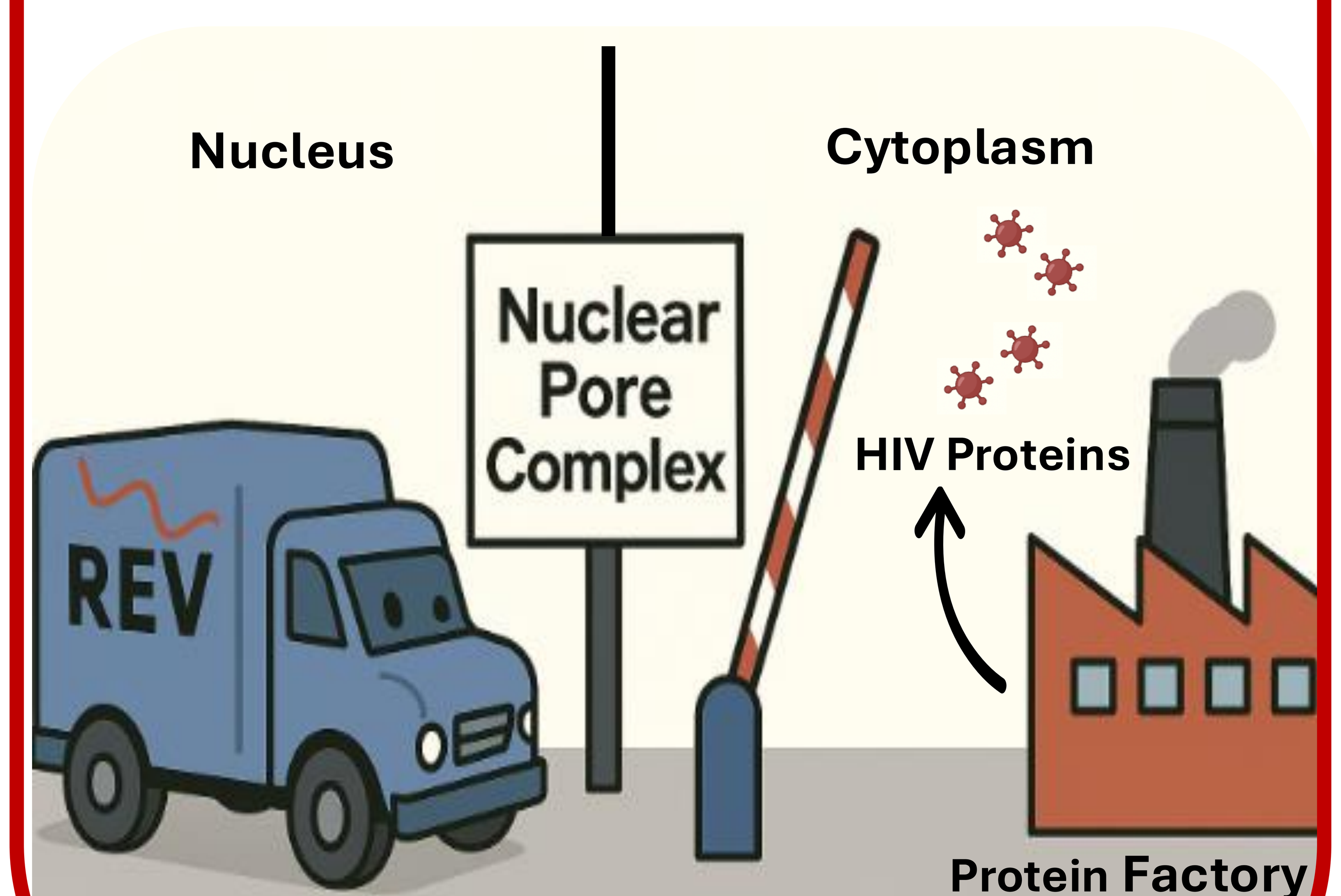
Central Dogma of Molecular Biology



HIV Life Cycle

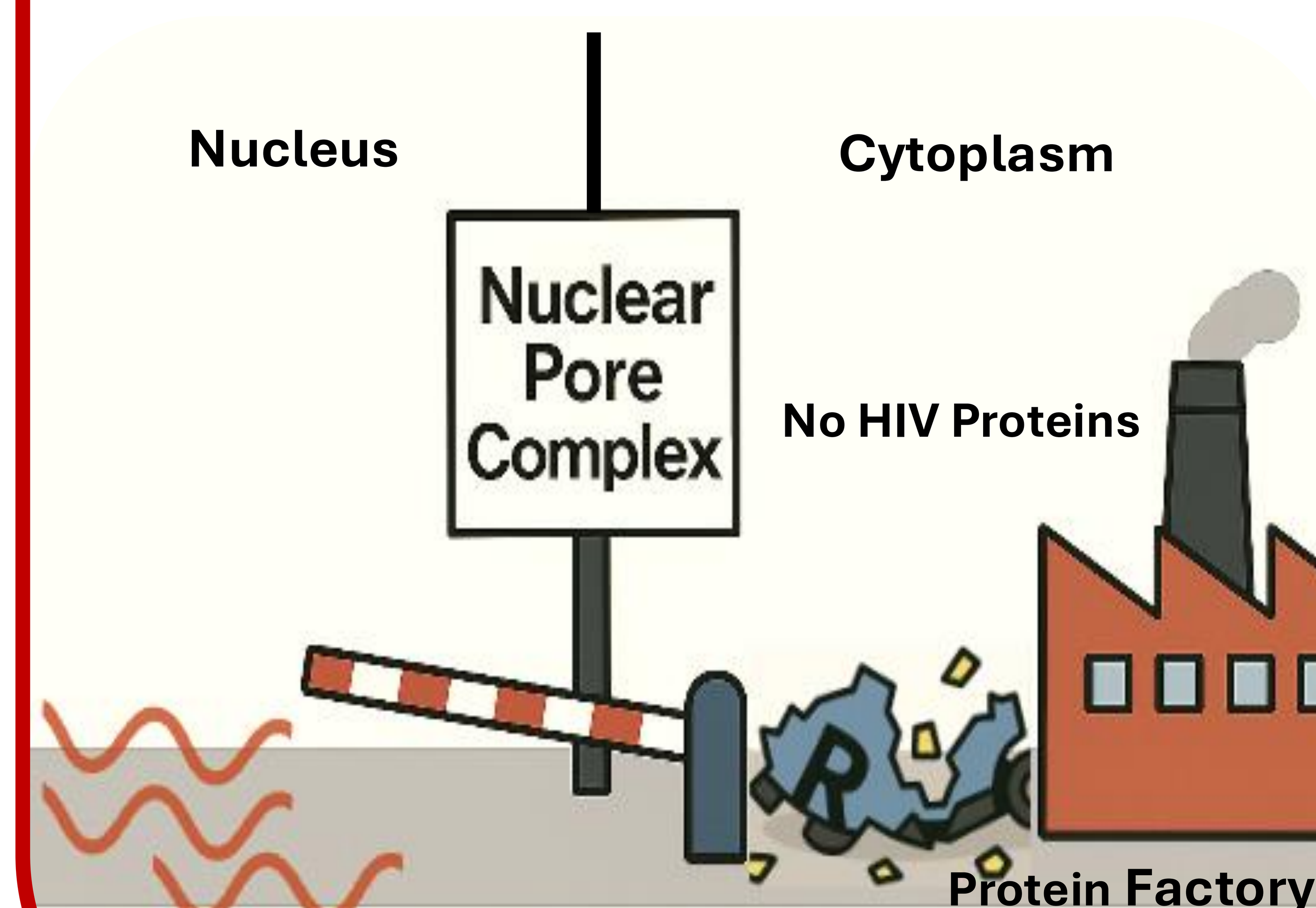


HIV-1 RNA's Journey



This step is critical for viral infection

No Rev, No Ride



Destroying Rev halts viral RNA movement in cells

Summary

- Rev transports HIV RNA within the cell
- Without Rev, HIV RNA gets trapped in the nucleus
- PROTACs can selectively destroy Rev
- No Rev → No HIV proteins → No new viruses ☺